Vol. XXVIII. No. 50

BOSTON, MASS., MONDAY, MARCH 1, 1909

PRICE THREE CENTS

# PROF. SEDGWICK TALKS ON DISEASES

Large Field for Efficient Men in Investigation of Diseases

#### TO LECTURE IN WEST

Correlated in Sanitary Engineering

Professor Sedgwick gave an account of the rapid promotion of public health at last Friday's evening entertainment. In the course of his life time he has been able to watch and aid in the correlation of the three sciences of medicine, engineering and biology in the one science of sanitary engineering.

Half a century ago, no one thought of such a thing as the study of public health improvement as a life work, but the inquisitive spirit of the time fostered the idea of looking into the cause of epidemics and the dreaded diseases that once in control seemed invincible. Today every disease is being investigated The states, with Massachusetts in the lead, have organized their attacks on the microbe by the establishment of states boards of health. The demands for efficient men for these and other boards more than exceeds the supply and the sanitary engineer has a great field before him for improving the world by a process that by the success of its efforts limits its own possibilities.

Professor Sedgwick will soon leave for the west where he will talk at several colleges on the possibility of their founding sanitary engineering courses similar to the one at the Institute.

## CLASS TEAMS PRACTICE

Exceeding all expectations of those in charge, nearly thirty men took the short cross country run from the Gym last Saturday. Of those on the run men numbered ten while the remaining over half were freshmen. The 1911 two were seniors. Capt. Jacobs was in charge of the run and he set a slow pace until within a half a mile of the finish when H. S. Benson the 1912 class team captain set a faster pace for the finish of the run.

The class teams will both run tomorrow from the Gym and also next Saturday. The sophomores will also take a short run on Thursday at five o'clock. J. D. MacKenzie will have charge of the 1911 men on Tuesday while Capt. C. P. Eldred will have charge of them on Thursday and Saturday. Capt. Benson will have charge of the freshmen on all of their runs.

Those on the run last Saturday were R. Ellis 1909, J. N. Stephenson 1909, Capt. E. Jacobs 1910, C. P. Eldred 1911, J. D. MacKenzie 1911, R. H. Lord 1911, R. Emmel 1911, R. M. George 1911, R. L. Hayward 1911, C. L. Johnson 1911, H. G. Jenks 1911, E. W. DeWitt 1911, F. Russell 1911, and H. S. Benson, C. L. Tuller, E. E. Ferry, R. M. Ferry, J. R. Park, K. Cartwright, S. H. Seelye, G. S. Sawyer, R. E. Whipple, J. I. Taylor, F. E. Stadrr, H. G. Watkins, K. Pruyn, G. H. Rhodes, all 1912.

## RHODE ISLAND WINS

Providence, Feb. 27, 1909.—Technology was defeated by Rhode Island state college 5 today 38 to 20.

Rhode Island-Sullivan rf, E. F. Smith lf, Barker c, H. Smith rf, Doll lg. M. I. T.-Wentworth lg, Taite rg,

Parker c, Bennis If, Hargrave rf. Goals from floor, Sullivan 9, E. Smith 7, H. Smith 3, Bennis 2, Parker 2, Wentworth 2, Taite and Hargrave.

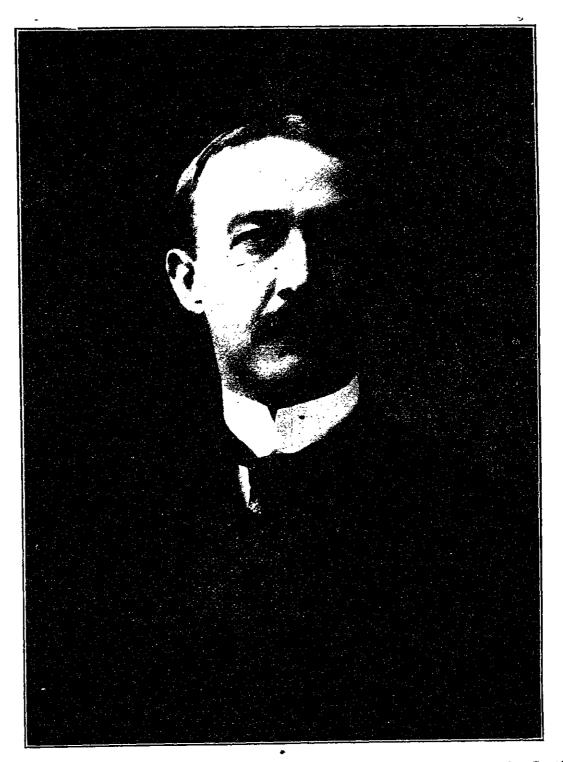
Goals from fouls—Parker 4. Umpire—Williams of New London. Time—20 m. half.

# CHARLES M. SPOFFORD IS APPOINTED HAYWARD PROFESSOR IN CIVIL COURSE

Alumnus and Former Instructor at the Institute Will Assume Professorship at Opening of Next School Year

## IS AT PRESENT AT BROOKLYN POLYTECHNIC

Medicine Engineering and Biology | Professors Allen, Porter, Spofford and Robbins are to Head Courses in Railroad, Hydraulie, Structural and Topographical Engineering Respectively



poration at its stated meeting on Fri- tute to take up a post-graduate course day, February 26th, voted to appoint in civil engineering under Professor Professor Charles M. Spofford to the Hayward Professorship of Civil Engineering, which will become vacant at the beginning of the next school year, through the resignation of Professor George F. Swain. The department of Civil and Sanitary Engineering will be organized for the ensuing year upon the at the Institute, but returned for the following basis: Professors Allen, Porter, Spofford and Robbins will be asked thus received nearly three years of to take charge of the instruction in railroad engineering, hydraulic engineering, structural engineering, and topographical engineering, respectively. Professor Allen will be asked to act as administrative officer of the department in its general relations; Professor Spofford to act as representative of the course in Civil Engineering in its relations with the Faculty and with students: and Professor Porter to act as representative of the course in Sanitary Engineering in similar relations.

#### Life of Prof. Spofford

Mr. Spofford was graduated from the Putnam School in Newburyport in 1889, and immediately entered the Institute, receiving the degree of Bachelor of Science in Civil Engineering in 1893. During the following summer and fall he opening of the second term of the school

The Executive Committee of the Cor-1 year 1893-94 he returned to the Insti-Swain.

After completing his post-graduate studies in 1894, Mr. Spofford entered the employ of the Phoenix Bridge Company of Phoenixville, Pa., remaining there until October, 1896, when he resigned to become assistant in civil engineering summers of 1897 to 1900, inclusive. He training in the engineering corps of one of the leading bridge companies of this country.

## Practical Experience

During the nine years that Mr. Spofford was connected with the teaching staff of the Institute, he spent several summer vacations and some time during the school year in the employ of the Engineering Department of the City of Boston as assistant engineer upon the design of a number of bridges, including the Broadway, Atlantic Avenue, and Northern Avenue bridges and upon miscellaneous structural work. At that time the bridge work of the city was under the charge of the late John E. Cheney, who was one of the ablest structural engineers in this country, and who achieved a wide reputation through was engaged in field and office work | the excellence of his designs. During | 1.00. Hare and Hounds meeting. upon the survey of the Massachusetts that period Mr. Spofford was associated 4.15. Tech Show Chorus Rehearsal. and Vermont boundary line. At the with Mr. Cheney in consulting work 7.30. M. A. H. S. Club Meeting at the (Continued on page 3.)

# FINAL CHORUS FOR TECH SHOW PICKED

Coach Francis Chooses From Largest List of Men on Record

#### ASST. STAGE MANAGER

Chorus Now Practices Regularly on Mondays, Wednesdays and Fridays

Coach Francis selected the final chorus from among the provisionals at the show rehearsal on Wednesday. The following men were chosen:-

Girls:-J. E. Barnard 1910, K. Barr 1914, J. A. Bigelow 1914, H. S. Cleverdon 1910, R. Cremer 1912, O. B. Denison 1911, F. H. Dierks 1912, D. Follett 1912, R. H. Fox 1912, L. G. Fitzherbert 1911, M. II. Grossman 1911, S. H. Guthrie 1910. H. H. Griffin 1912, L. R. Golden 1911, J. H. Holbrook 1910. A. L. Harding 1910, J. M. Hargraves 1912, G. F. Hodge 1911, C. P. Kerr 1911. E. H. Nash 1911, H. J. McDonald 1912, R. Walsh 1912, W. P. Welch 1911, and R. A. D. Preston 1910.

Men:-W. C. Bird 1912, S. Bates 1911, D. E. Bent 1912, C. H. Carpenter 1912,C. O. Dunlap 1911, L. B. Duke 1912, A. L. Fabens 1910, W. S. Gordon 1909, Il. G. Jenks 1911, F. H. Moore 1911, W. Y. Stamper 1911, S. Upham 1912, E. D. Van Tassel 1911, J. E. Whittlesey 1912. G. S. Watson 1912, and C. Il. Stewart 1912.

The chorus and dancers will rehearse on Monday. Wednesday and Friday afternoons, the other days will be devoted to rehearing of the principals. It is absolutely necessary that every principal and every chorus man should be at every rehearsal and be there on

As a result of the competition for assistant stage manager, Erwin Haskell Schell 1912, of Kalamazoo, Mich., has been appointed to the position.

#### FENCERS VICTORS AGAIN

Saturday night the Tech Fencing Team defeated Pennsylvania 6 to 3. Pennsylvania has one of the most superior teams of any of the colleges this year, having recently beaten the polis team by a score of 5 to 4.

This is the first time Knox has been defeated since he entered the institute. The individual bouts were as follows: Bont 1—Knox T defeated Leymel P. Bout 2-1.oring T defeated McClin-

tock P. Bout 3- Wendell P defeated Grubnau

Bout 4—Loring T defeated Leymel P. Bout 5-McClintock P defeated Grubnau T.

Bout 6-Wendell P defeated Knox T. Bout 7—Goodnau T defeated Leymel

Bout 8-Knox T defeated McClintock

Bout 9-Loring T defeated Wendell P. The referee was Tetaz, N. Y. A. C. The judges were H. L. Goldberg and D. O. Frick.

The director of the bouts, Godfrey S. Mahn.

#### CALENDAR

MONDAY, MARCH 1.

4.00 Trials for new men in mandolin and banjo clubs at the Union. 4.15. Tech Show chorus rehearsal.

TUESDAY, MARCH 2.

1.30. Prize drill committee in 16 Rog-4.15. Tech Show principals rehearsal.

WEDNESDAY, MARCH 3.

Union.

## THE TECH

Published every Monday, Wednesday, and Friday during the college year by students of the Massachusetts Institute of Technology.

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Subscription - - - \$1.50 per year in advance. Single Copies 3 Cents.

Printed by Old Colony Press, Boston.

#### Monday, March 1, 1909.

Frederic H. Fay 1893, Chief Engineer of the city of Boston, in an interview with The Tech, makes the following statement concerning the appointment of Mr. Spofford:—

In securing Professor Spofford as the successor of Professor Swain as head of the Department of Civil Engineering, I believe that the Institute has made a most fortunate choice. In the teaching of structural engineering the Institute is probably ahead of any other institution in the country. By reason of his training both as an undergraduate and as a graduate student at the Institute, supplemented by his broad experience in active practice, Professor Spofford will maintain the structural engineering course fully up to its present high standard and the Civil Engineering Department will continue to be kept abreast and ahead of the times. Professor Spofford is a man of well balanced judgment, proven executive ability and breadth of mind. It is to be said that he is a student of conditions and tendencies in education and engineering as well as of books. Among competent engineers and educators who are acquainted with him and his work he is considered a coming man.

A young man, an enthusiastic and tireless worker, a popular and successful teacher, Charles M. Spofford, comes to the Institute, with not only theoretical, but also much practical knowledge. He has had opportunities for experience such as few engineers and, particularly, professors of engineering get. His broad training includes study in Europe and Americal and he is familiar with the technical schools throughout the country.

He is a man who believes thoroughly in the Institute system and Technology traditions. He has been an active and loyal member of the alumni and was instrumental in raising the alumni fund some years ago.

In his teaching at Brooklyn Polytechnic and in New York he has become noted for the enthusiasm which he puts into his work. In engineering circles he is well known and highly esteemed. The character of his work thus far forecasts the future and more than warrants his appointment to the Hayward Professorship of Civil Engineering. Under his leadership that course promises to grow even stronger and to ever hold the high place which it has as one of the best in the country.

#### STENOGRAPHER BEGINS

The Institute Committee has opened an office in Room A of the Union for the convenience of the undergraduates. where Mr. Foster, the man who is in charge, will do book-keeping, stenography, and type-writing for the activities or for any person connected with the Institute. Seniors can get their theses typewritten, or any person desiring to write a letter, can have it done in a business-like way for a very reasonable price. The charge for this work will be 50 cents per hour, with a mininum of ten cents. This price is practically one half the rate charged by public stenographers, thus giving Institute men a chance to get their work done here at a very moderate expense.

#### **BROWN DEFEATS TECH**

Brown chess players swamped the Technology team in a six man match at the Union last night. At no time was the result of the match in doubt, the Providence team winning six straight games.

The summary:-

BROWN TECHNOLOGY

Gratch 1 Navarro 0
Merkel 1 Bates 0
Corp 1 Kaufman 0
Emmon 1 Baker 0
Freeman 1 Mylchreest 0
McCoy 1 Schmidt 0
Score: Brown 6; Technology 0.

#### DR. LUCKE LECTURES

Dr. Lucke, head of the Mechanical Engineering Department of Columbia, spoke to the Society of Arts Saturday night on the possibilities of gas engines. He took up the principles of the engines, method of mixing the gases and exploding the mixtures, and the various means of producing gas from raw material.

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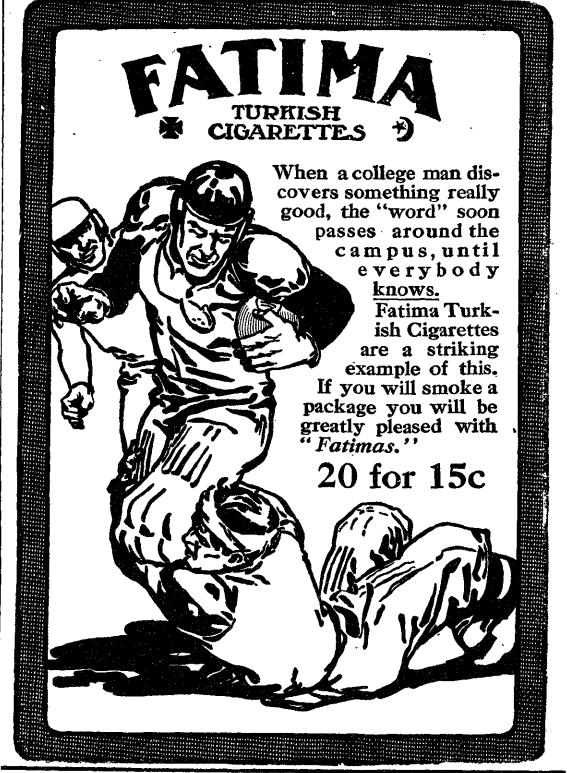
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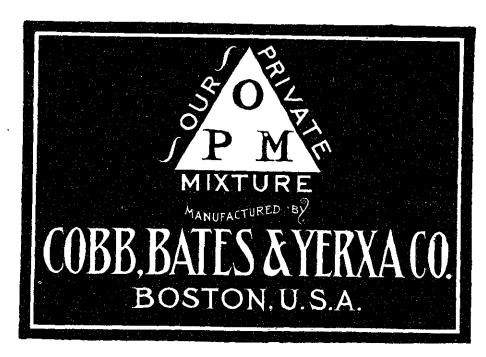
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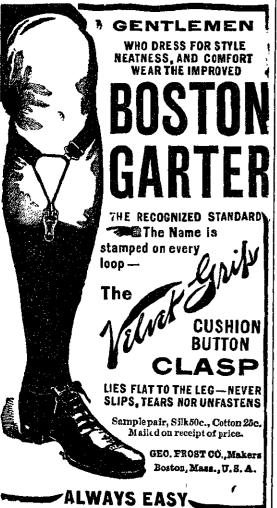
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#### CHARLES M. SPOFFORD

(Continued from page 1.)

upon bridges and buildings.

He has examined and reported upon the condition of a number of bridges and other structures, and as consulting engineer for the Boston Elevated Company, examined, reported upon and designed the reinforcement required to place a number of Boston bridges in condition for heavy street car traffic. The work included a very original and ingenious design for strengthening the Boylston Street bridge over the Boston & Albany Railroad.

Since going to Brooklyn, Professor Spofford has been employed by the City of New York as an expert upon a question relating to the strength of mortar. He has also done experimental work for one of the prominent contractors of New York and for one of the larger asphalt companies of the city. His principal consulting work in New York has been that done during the summer of 1908, when with Mr. C. W. Hudson he investigated the strength of the Blackwell's Island bridge, a statistically indeterminate work requiring the application of the highest principles of structural design for its solution. This is the second largest and heaviest bridge in the world, and the experience gained in this investigation is one which few engineers are fortunate enough to obtain. Professor Spofford has an office in New York, where he is associated with Mr. Hudson, in a firm of consulting engineers.

#### Teaching Experience

Professor Spofford was a member of the instructing staff of the Institute from 1896 to 1903. At the Institute he taught bridge design and structures, and he gave the course in foundations during the latter portion of his stay. He was engaged also in surveying field work and in the railroad survey.

In 1905 he was appointed Professor of Civil Engineering at the Brooklyn Polytechnic Institute. At this time this institution was entering upon a new career under a new president, and he was engaged to reorganize the civil engineering department. This he has done so thoroughly that the standard now existing there is probably excelled by few, if any, institutions in the country.

Sinsce going to Brooklyn he has taught hydraulies and mechanics of materials throughout the four years, and for two years has taught the subjects of public water supply and sewage disposal. From the beginning he has taught a course in foundations and has taken personal charge of all work in structures and bridge design, the two latter subjects being the strongest feature of the Civil Engineering course.

A notable feature of his work in Brooklyn has been his evening lectures upon structures and his Saturday afternoon exercises in bridge design, these lectures are taken by adults of from twenty to forty years of age who are engaged in active engineering work in and about New York, most of these men being graduates of college and other technical schools, including graduates of the Institute.

In connection with his teaching at Brooklyn, Professor Spofford is preparing a very complete work on structures, which will contain much original matter, and be of great practical use, the aim being to prepare a thorough treatment of the fundamental principles and to illustrate these principles by numerous examples; higher types of structures being also treated in a clear and practi-

Professor Spofford is a member of the American Society of Civil Engineers, of the Boston Society of Civil Engineers, and of the Brooklyn Engineers Club; of the latter he is a director, and for the last year has been chairman of its committee on entertainments; he has been a member of the committee on reinforced concrete of the National Association of Cement Users, and is a member of the Society for the Promotion of Engineering Education. He is also a member of the Hamilton Club of Brooklyn, the leading social club of that city.

Charles A. Gibbons, 1908, who since his graduation has been an assistant in the Mining Engineering Department, left Thursday for Kelvin, Arizona, where he is to enter the employ of a large mining company.

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AND

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The Review aims to develop closer relations among Institute men and to stimulate their in terest in the work of the College. It is in no sense an engineering magazine, but deals broadly with the problems of Technological Education and the responsibilities of the pro-

THE REVIEW is published during January, April, July, and October. Communications should be addressed to The TECH NOLOGY REVIEW, 83 Newbury St., Boston

SUBSCRIPTION, TWO DOLLARS A YEAR SINGLE COPIES,

#### NOTICES

Trials for the new men for the mandolin club will be held at the Union this afternoon and Thursday afternoon at 4 o'clock. The object of these trials is to get new men ready for next year, and a good chance for all mandolin players is offered. The management urge that anyone who has ever played a mandolin, mandola, or guitar report at these trials, which will be under the direction of H. J. Stiebel, 1909.

Similar trials are to be held on the same days at 4 o'clock in the Union for new men for the banjo club, under the direction of Harold Sharp 1909.

1912-Class Pipes must be left with Ruby or Walsh to have initials before Wednesday at 4 o'clock.

PRIZE DRILL.-Committee Meeting, Tuesday, March 2nd, at 1.30 sharp in 16 Rogers.

There will be a meeting of the Exeter Club Tuesday at one o'clock in 26 Rogers.

Several slide rules have been found and left at the Bursar's office.

HARE AND HOUNDS CLUB.—There will be an important meeting of this club on Wednesday at one o'clock in the Union. Any one who has paid his dues of 50 cents since April, 1908, is a member and should be on hand to elect officers.

#### SENIOR PORTFOLIO.

If there are any men who are eligible for the Portfolio and who have not been given orders at Notman's, they should notify any of the committee at

All men must have made appointments with Notman Photo Co. before

The committee will give out any further information that is desired. Committee: C. N. Harrub, W. J. Kelly, J. W. Nickerson, A. L. Shaw, H. E. Whitaker.

MANDOLIN CLUB.—Rehearsals at the Union this afternoon and Thursday afternoon at four o'clock.

WAITERS-Position open for an assistant head waiter at the Union Dining Room. See steward for particulars.

Subscriptions to the Tech for the remainder of the year for sale at the Tech office, 30 C. Price, \$1.00.

## **CLASSIFIED ADS**

Advertisements under this head are inserted at the rate of five cents a line of six words, payable in advance, and copy should be handed to the business manager the morning before publication day.

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As a further inducement, with every five dollar order for information we will give free, in addition to the employment privilege, any book or a year of any magazine you specify, the publishers' price of which is not over one dollar. With a ten dollar order for information, we will give \$2 worth of books or magazines; with a \$15 order, \$3 worth; with a \$20 order, \$4 worth; with a \$25 order, \$5 worth; and so on. Two or more men may club together with several subjects to make such an order and divide the privileges among them.

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Arthur Everett Small (Late Special Investigator, U.S. Gov't) Director

2401 NORTH CAPITOL ST.,

WASHINGTON, D. C.